



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,737	03/31/2004	Thomas M. Hall	9827/10	7206

757 7590 04/11/2007
BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

WENDELL, ANDREW

ART UNIT	PAPER NUMBER
----------	--------------

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/814,737

Applicant(s)

HALL, THOMAS M.

Examiner

Andrew Wendell

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 38-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 38 and 39, the claimed limitation "wherein the amplitude modulating transmitter is synchronized to a pseudorandom code received from a source remote from the controller" is not described in the specification or in the drawings submitted by applicant. Examiner fails to see how this limitation is supported by the specification or drawings.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayo (US Pat# 5,133,081) in view of Zellner et al. (US Pat Appl# 2004/0088345) and further in view of Young (US Pat Pub# 2003/0194968).

Regarding claim 26, Mayo's remotely controllable message broadcast system including central programming station, remote message transmitters and repeaters teaches an interface (Fig. 7) that receives 728 (Fig. 7) and reconverts 726 (Fig. 7) waves to sound waves (Col. 13 lines 56-58); a publicly switched network 731 (Fig. 7) coupled to the interface; a amplitude modulating transmitter 713 (Fig. 7, Col. 20 lines 24-37) that encodes information received through the interface using a carrier wave of constant frequency having a varying amplitude; a controller 707 (Fig. 7) programmed to manage the information encoded onto the carrier wave 713 (Fig. 7 lines 24-37); and digital audio electronics 729 (Fig. 7, the signal from the handset is converted to a digital inputted signal into the controller, Col. 11 lines 37-51) configured to accept an input from a local handset 728 (Fig. 7) and the controller 701 (Fig. 7); wherein the controller 701 (Fig. 7) is located away from the amplitude modulating transmitter 713 (Fig. 7) and the digital audio electronics 729 (Fig. 7), and the controller is configured to transmit data 712 and 713 (Fig. 7). Mayo fails to teach using a transmission control protocol, an internet protocol, and Ethernet interface.

Zellner et al. access to IP-based emergency services teaches an interface (Fig. 6) using a transmission control protocol and an internet protocol (Sections 0031 and 0033-0034).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a transmission control protocol and an internet protocol as taught by Zellner et al. into Mayo's

Art Unit: 2618

message broadcast system in order to offer an option of using the internet to transmit an emergency message (Section 0012).

Zellner and Mayo fail to teach an Ethernet interface.

Young teaches an interface (Fig. 2a) that receives and reconverts waves to sound waves (Section 0010); a publicly switched network (Sections 0047 and 0114) coupled to the interface; a amplitude modulating transmitter (Section 0010) that encodes information received through the interface using a carrier wave of constant frequency having a varying amplitude; a controller 200 and 210 (Fig. 2a) programmed to manage the information encoded onto the carrier wave; and digital audio electronics (Section 0048) configured to accept an input from a local handset and the controller; and the controller is configured to transmit data through an Ethernet interface 301 (Fig. 3, Sections 0052, 0067, and 0097).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate an Ethernet interface as taught by Young into a transmission control protocol and an internet protocol as taught by Zellner et al. into Mayo's message broadcast system in order to install and configure the system easier (Section 0009).

Regarding claim 27, Mayo further teaches wherein the digital audio electronics 729 (Fig. 7) are configured to receive messages expressed through a combination of tones (Col. 15 lines 19-34 and from 731 of Fig. 7).

Regarding claim 28, Mayo further teaches wherein the digital audio electronics are further configured to receive messages through digital commands (from digital controller 701 and modem 722).

Regarding claim 29, Mayo further teaches wherein the digital audio electronics are further configured to receive messages through digital commands (from digital controller 701 and modem 722).

Regarding claim 30, Mayo further teaches modulator and a demodulator 722 (Fig. 7) that enables the controller to communicate across the publicly switched network 731 (Fig. 7).

Regarding claim 31, Mayo further teaches wherein the input comprises digitally encoded audio information (the audio storage assembly has digital messages, Col. 15 lines 19-34).

Regarding claim 32, Mayo further teaches wherein the input comprises a plurality of signals having frequencies in a range of perception of a human ear (Voice recordings and voice microphone, 728 of Fig. 7).

Regarding claim 33, Mayo further teaches a frequency modulation transmitter that encodes information received through the interface (Col. 20 lines 24-37).

Regarding claim 34, Mayo further teaches a synchronizing device that coordinates a communication facilitated through the digital audio electronics with a second communication occurring at a second location (Col. 20 lines 44-48).

Regarding claim 35, Mayo further teaches a synchronizing device that matches a timing of a broadcast transmitted from the amplitude modulating transmitter with a

Art Unit: 2618

second broadcast transmitted from a second amplitude modulating transmitter located away from the amplitude modulating transmitter (Col. 20 lines 44-48).

Regarding claim 36, Mayo further teaches wherein the amplitude modulating transmitter and the second amplitude modulating transmitter broadcast at a common frequency (Col. 20 lines 24-48).

Regarding claim 37, Mayo further teaches wherein the synchronizing device is configured to transmit a wireless sync signal (Col. 20 lines 24-48).

5. Claims 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayo (US Pat# 5,133,081) in view of Nicolai et al. (US Pat Pub# 4,188,580).

Regarding claim 38, Mayo's remotely controllable message broadcast system including central programming station, remote message transmitters and repeaters teaches an analog interface (Fig. 7); a publicly switched network 731 (Fig. 7) coupled to the analog interface; an amplitude modulating transmitter 713 (Fig. 7, Col. 20 lines 24-37) that encodes information received through the analog interface using a carrier wave of constant frequency having a varying amplitude; a controller 701 (Fig. 7) programmed to manage the information encoded onto the carrier wave 713 (Fig. 7) and synchronize a plurality of broadcasts (Col. 20 lines 24-48); and digital audio electronics 729 (Fig. 7, Col. 11 lines 37-51) configured to accept an input from a local handset 728 (Fig. 7) and the controller 701 (Fig. 7); and a modulator and a demodulator 722 (Fig. 7) that enables the controller to communicate across the publicly switched telephone network 731 (Fig. 7) wherein the controller 701 (Fig. 7) is located

Art Unit: 2618

away from the amplitude modulating transmitter 713 (Fig. 7). Mayo fails to teach a transmitter that is synchronized to a pseudorandom code.

Nicolai teaches a transmitter 36, 38, 16 (Fig. 1) is synchronized to a pseudorandom code 10 (Fig. 1) received from a source remote from the controller.

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a transmitter that is synchronized to a pseudorandom code as taught by Nicolai into Mayo's message broadcast system in order to provide a secure transmission system (Col. 2 lines 34-43).

Regarding claim 39, Mayo teaches an analog interface (Fig. 7); a publicly switched network 731 (Fig. 7) coupled to the analog interface; an first amplitude modulating transmitter 713 (Fig. 7, Col. 20 lines 24-37) that encodes information received through the analog interface using a carrier wave of constant frequency having a varying amplitude; a controller 701 (Fig. 7) programmed to manage the information encoded onto the carrier wave 713 (Fig. 7); digital audio electronics 729 (Fig. 7, Col. 11 lines 37-51) configured to accept an input from a local handset 728 (Fig. 7) and the controller 701 (Fig. 7); a modulator and a demodulator 722 (Fig. 7) that enables the controller to communicate across the publicly switched telephone network 731 (Fig. 7); a synchronizing device configured to synchronize a broadcast from the first amplitude modulating transmitter with a second broadcast transmitted from a second amplitude modulating transmitter (Col. 20 lines 24-48); wherein the controller 701 (Fig. 7) is located away from the amplitude modulating transmitter 713 (Fig. 7) and

Art Unit: 2618

the digital audio electronics 729 (Fig. 7), and the first amplitude modulating transmitter 713 (Fig. 7) and the second amplitude modulating transmitter are configured to transmit highway advisories (Col. 22 lines 7-35). Mayo fails to teach a transmitter that is synchronized to a pseudorandom code.

Nicolai teaches a transmitter 36, 38, 16 (Fig. 1) is synchronized to a pseudorandom code 10 (Fig. 1) received from a source remote from the controller.

Regarding claim 40, the combination including Mayo teaches wherein the first amplitude modulating transmitter 713 (Fig. 7) is located away from the second amplitude modulating transmitter 101 (Fig. 1).

Regarding claim 41, the combination including Mayo teaches wherein in the modulator and the demodulator 722 (Fig. 7) enables the controller to communicate across the publicly switched telephone network 731 (Fig. 7) in a serial format.

Regarding claim 43, the combination including Mayo teaches wherein the controller 701 (Fig. 7) is programmed to monitor the publicly switched telephone network 731 (Fig. 7), the amplitude modulating transmitter 713 (Fig. 7), the controller 701 (Fig. 7), the digital audio electronics 729 (Fig. 7), the modulator and the demodulator 722 (Fig. 7), and the synchronizing device (Col. 20 lines 24-48).

Regarding claim 44, the combination including Mayo teaches wherein the controller 701 (Fig. 1) comprises a computer (digital audio files from 729 of fig. 7).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2618

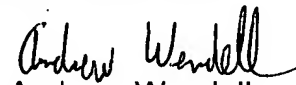
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

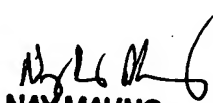
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Andrew Wendell
Examiner
Art Unit 2618

4/5/2007


NAY MAUNG
SUPERVISORY PATENT EXAMINER